

Promoting Clean Energy in the American Power Sector

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Resources for the Future

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Policy Objectives

Deliver fiscal benefits

Promote investment

Streamline regulatory landscape

Improve global environment



Design Principles

Simplicity

Cost-effectiveness

Price certainty



National Clean Energy Standard

Technology-neutral performance goals

- Metric tons of CO₂ per megawatt hour

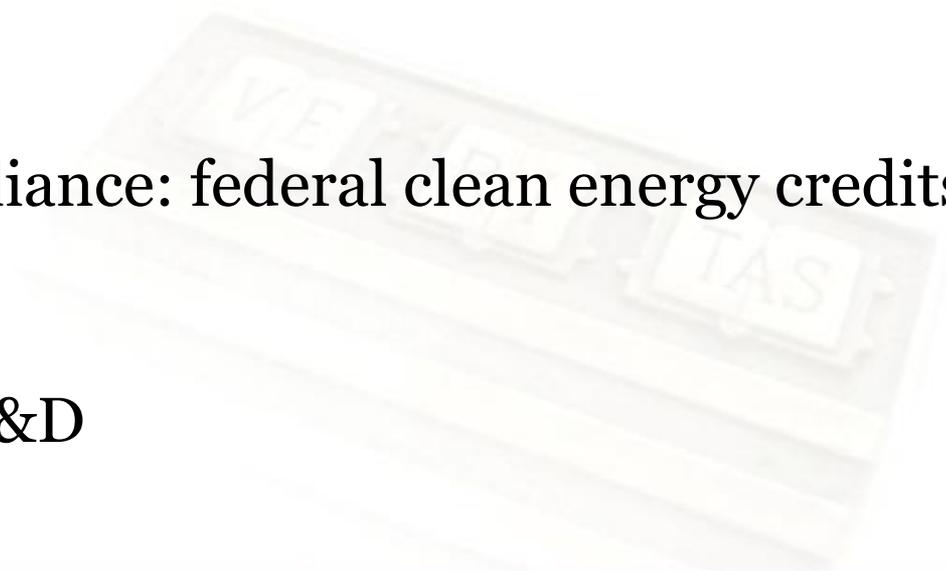
Tradable clean energy credits

- Power plants create and trade credits

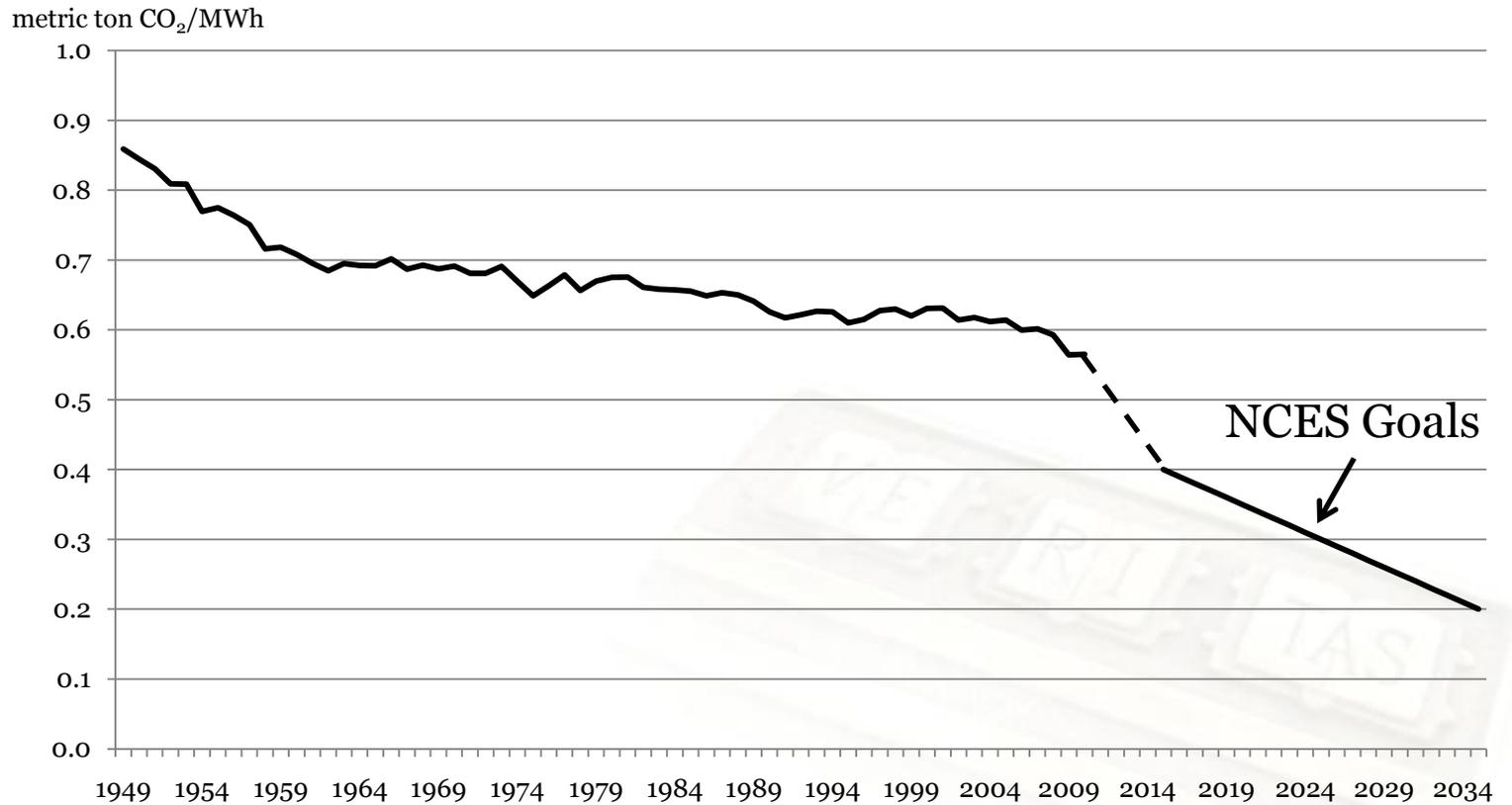
Compliance

- Alternative compliance: federal clean energy credits

Clean energy fund

- Finance energy R&D
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U.S. Power Emission Intensity



Investment Incentive

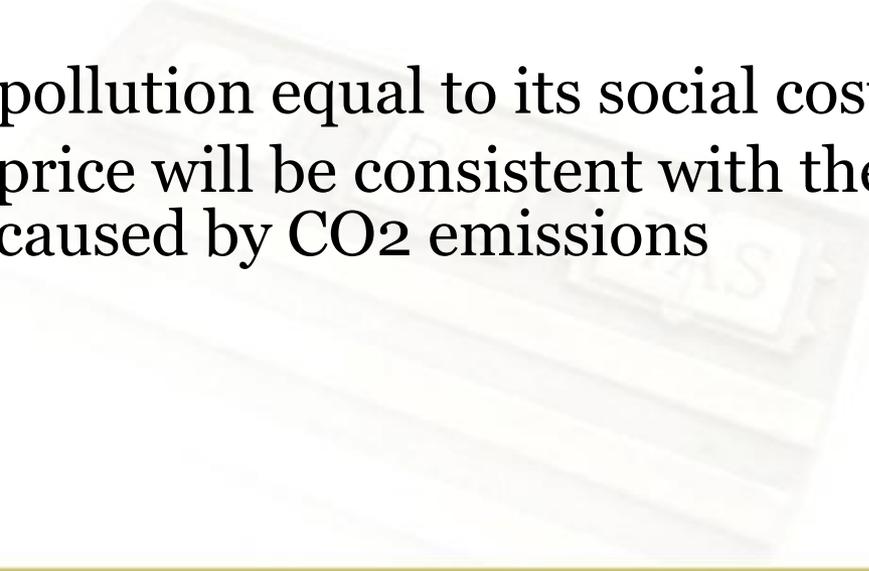
Federal clean energy credit price

- \$15 per credit in 2015 ramping up to \$30 in 2025

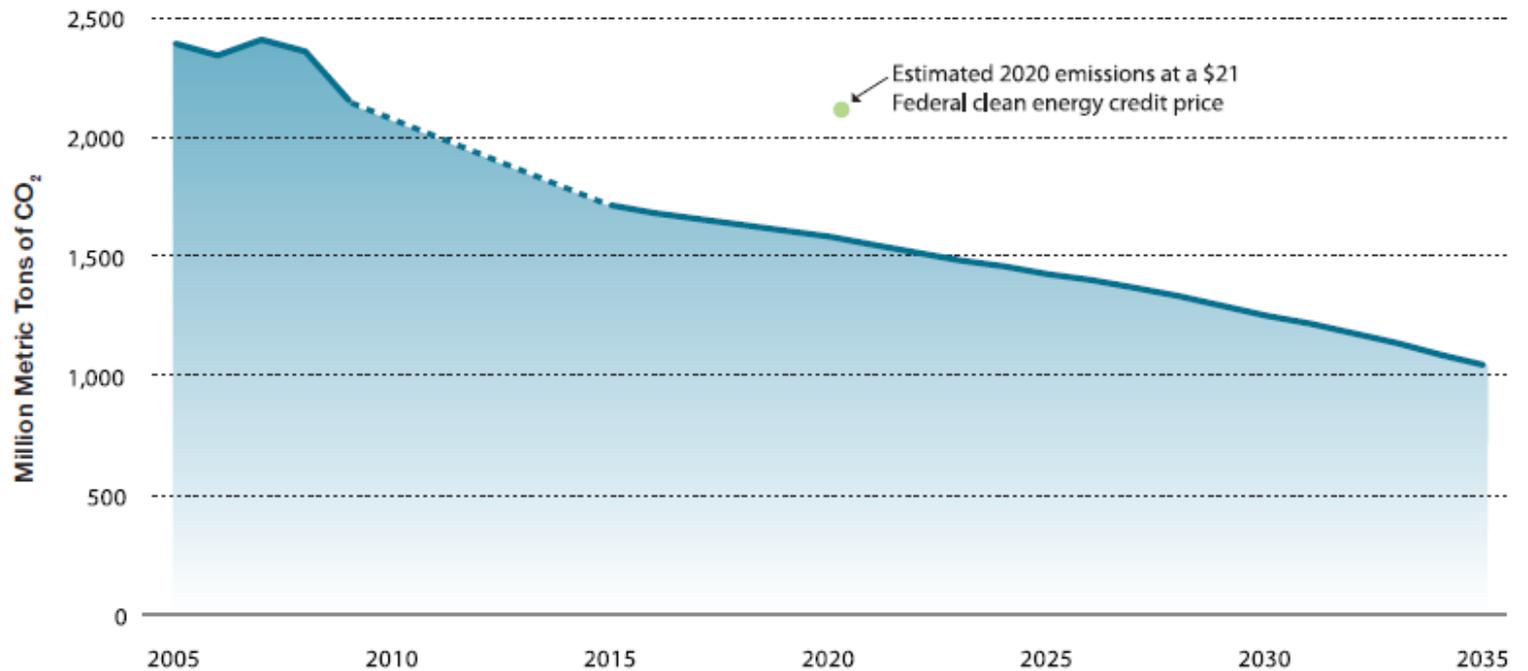
Federal credits will effectively set tradable credit price

- \$21/MWh average return for renewable thru 2024

Implicit price on CO₂ pollution equal to its social cost

- By 2025, the credit price will be consistent with the economic damages caused by CO₂ emissions
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Carbon Pollution Benefits



Electricity Rate Impacts

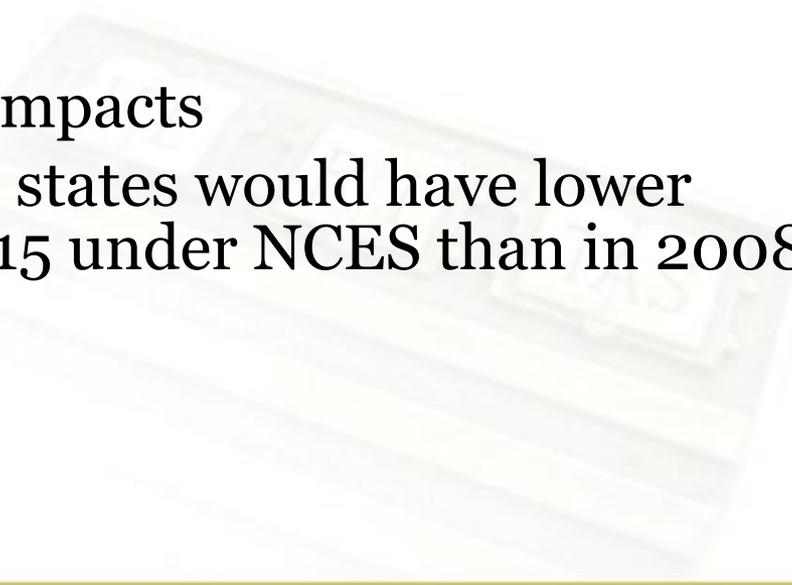
Federal clean energy credit price

- \$15 per credit in 2015

Upper bound U.S. electricity rate impact in 2015

- About one-quarter of a cent per kWh

Regional electricity rate impacts

- About two out of three states would have lower electricity prices in 2015 under NCEs than in 2008
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Clean Energy Fund

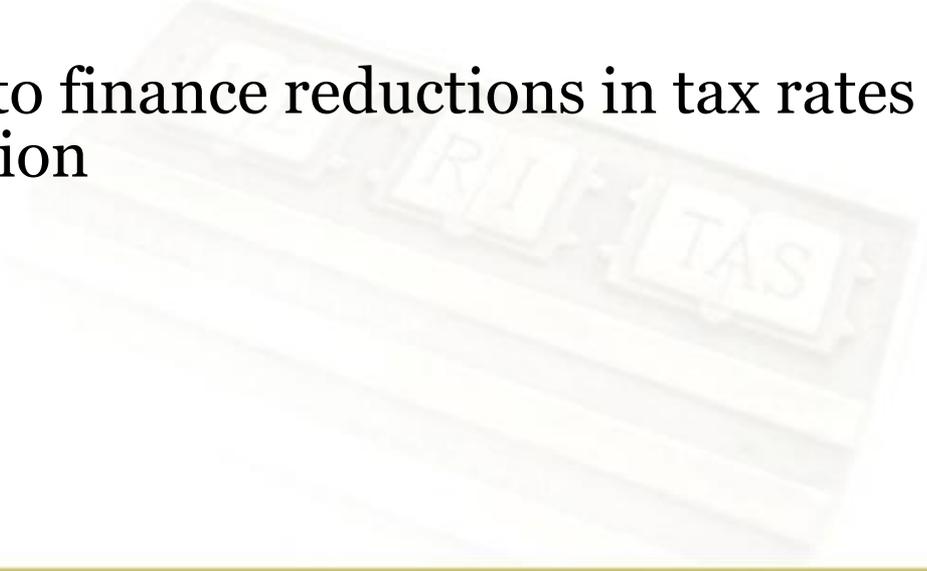
Clean energy fund would support energy R&D

- ARPA-E

Federal clean energy credit revenues directed to fund

- \$2 billion in 2015, ramping up to \$5 billion in 2025

Balance of revenues to finance reductions in tax rates and/or deficit reduction



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The Hamilton Project Discussion Paper 2011-04

The Hamilton Project Policy Brief 2011-04

www.brookings.edu/papers/2011/05_clean_energy_aldy.aspx

